

Title (en)
AN APPARATUS AND METHOD FOR SELFADAPTING DISPERSION COMPENSATION

Title (de)
VORRICHTUNG UND VERFAHREN FÜR EINE SELBSTANPASSENDE DISPERSIONSKOMPENSATION

Title (fr)
APPAREIL ET PROCEDE DE COMPENSATION DE DISPERSION AUTO-ADAPTATIVE

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Application
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Abstract (en)
[origin: EP1971051A1] The present invention discloses an apparatus and method for adaptive dispersion compensation, the apparatus comprising: a coarse-grain tunable dispersion compensator, a receiver with electric adaptive dispersion compensator, and a control logic unit. In the method, firstly it is to perform optical dispersion compensation for the input optical signals: then to perform electric dispersion compensation for the optical signals for which the optical dispersion compensation is performed; it is to detect the performance parameters of the receiving of the optical signals for which the electric dispersion compensation has been performed, and based on the performance parameters, it is to perform optical dispersion compensation adjustment for said input optical signals. With an optical de-multiplexer further, said apparatus can perform adaptive dispersion compensation for the multi-channel system. By using the apparatus and method for adaptive dispersion compensation of the present invention, it significantly reduces the number of adjustments as well as decreases the dispersion compensation time and can fast and accurately realize a wide range of adaptive dispersion compensation for either single channel or multi-channel.

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Citation (search report)

- [X1] EP 1237307 A2 20020904 - FUJITSU LTD [JP]
- [X1] WO 2004077111 A2 20040910 - OPLINK COMMUNICATIONS INC [US]
- [X1] CA 2453012 A1 20050612 - JDS UNIPHASE CORP [US]
- [X1] KOC U ET AL: "Adaptive opto-electronic compensator for excessive filtering, chromatic and polarization mode dispersion", 2005 OPTICAL FIBER COMMUNICATIONS CONFERENCE TECHNICAL DIGEST (IEEE CAT. NO. 05CH37672) IEEE PISCATAWAY, NJ, USA., vol. 4, 6 March 2005 (2005-03-06), pages 263 - 265, XP010831896, ISBN: 978-1-55752-783-7
- See references of WO 2007071104A1

Citation (examination)

- US 2002015207 A1 20020207 - OOI HIROKI [JP], et al
- EP 1465360 A2 20041006 - FUJITSU LTD [JP]
- US 2005147415 A1 20050707 - FEE JOHN A [US], et al
- US 2004037569 A1 20040226 - KAMALOV VALEY F [US], et al
- WO 03061164 A2 20030724 - MARCONI UK INTELLECTUAL PROP [GB], et al

Cited by
CN101989879A; EP2403168A1

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